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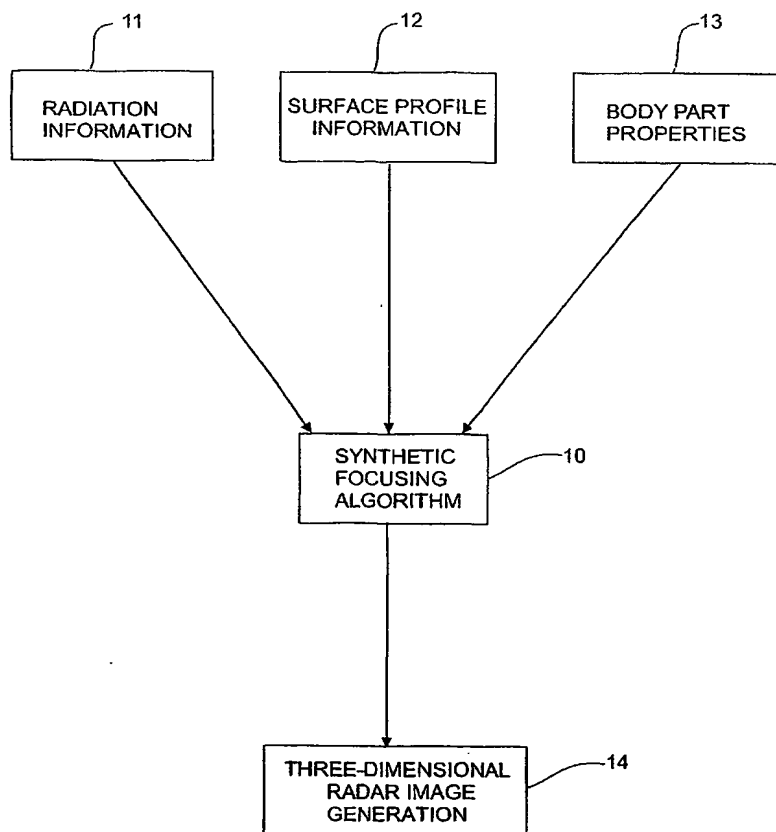
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(54) Title: SYNTHETIC FOCUSING METHOD



(57) Abstract: A method of generating a three-dimensional radar image of a body part having multiple image points. The method comprises receiving radiation information (11) obtained at an array of scan locations relative to the body part, surface profile information (12) relating to the body part, and estimates of body part properties (13). The method further comprises constructing each image point by: determining the minimum optical paths between each scan location and the image point based on the scan locations, surface profile information and body part properties; phase-shifting the radiation information based on the minimum optical paths to equalise the radiation information; and then summing the equalised radiation information to provide a value for the image point. The 3D radar image of the body part is then generated based on the values of each of the image points.

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